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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,229	02/20/2004	Vincent W. Hsieh	VHSIEH-1X	7424
38030	7590	04/03/2007	EXAMINER	
JEFFREY HALL 212 CLINTON ST SANTA CRUZ, CA 95062			LAFORGIA, CHRISTIAN A	
			ART UNIT	PAPER NUMBER
			2131	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/783,229

Applicant(s)

HSIEH, VINCENT W.

Examiner

Christian La Forgia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-18 have been presented for examination.

Priority

2. Acknowledgment is made of applicant's claim of priority to provisional application No. 60/512,948, filed on 20 October 2003.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 17 and 18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As per claims 17 and 18, merely claimed as a computer software representing a computer listing *per se*, that is, descriptions or expressions of such a program and that is, descriptive material *per se*, non-functional descriptive material, and is not statutory because it is not a physical "thing" nor a statutory process, as there are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed aspects of the invention which permit the computer program's functionality to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer, the program itself is not a process, without the computer-readable medium needed to realize the computer program's functionality. In contrast, a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program's functionality to be realized, and is thus

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statutory. **Warmerdam**, 33 F.3d at 1361, 31 USPQ2d at 1760. **In re Sarkar**, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978). See MPEP § 2106(IV)(B)(1)(a).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are requesting communication by a client for connection to a communication server; receiving said connection request and a handshake sequence is performed between said client and said communication server; establishing a secure connection between said client and said communication server; coordinating a new connection with the client by the communication server; initiating a handshake sequence with a second client via the communication server; and establishing a connection between the two clients via the communication server as can be seen by Figure 5.

7. Claims 1-8, 17, and 18 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph. The claims are narrative in form and replete with descriptive, functional or operational language. The method must be organized and correlated in such a manner as to present a complete operative method.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 2, 5, 7-12, 15, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,681,327 to Jardin et al., hereinafter Jardin.

10. As per claim 1, Jardin teaches a method for secure communication, comprising:
secured communications between a server and a client (Figure 2, column 4, lines 34-59, i.e. client initiates a handshake operation with the broker pursuant to the SSL protocol), and between two clients, for ease of access and transparency, from any location to any location, within said computer system (column 8, lines 2-17, i.e. the client and transaction server conducting transactions through the broker).

11. Jardin discloses that the communication occurs using a single secure communication port in disclosing that the communication between the client and broker and the broker and server and vice versa occurs using SSL. U.S. Patent No. 7,149,892 to Freed et al., hereinafter Freed, establishes that SSL communication occurs on port 443 at column 3, lines 20-23 and column 5, lines 48-56. Therefore, since the client and broker and the broker and server all communicate using SSL, they are only using secure port 443.

12. Regarding claims 2, 8, 10, and 18, Jardin teaches wherein said single secure communication port is SSL port 443, in his disclosure of SSL throughout the patent. As noted in U.S. Patent No. 7,149,892 to Freed et al., hereinafter Freed, establishes that SSL communication occurs on port 443 at column 3, lines 20-23 and column 5, lines 48-56.

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13. Regarding claims 5 and 15, Jardin teaches wherein said single communication port allows ease of management by establishing a secure connection between said two clients (column 8, lines 2-17).

14. As per claim 7, Jardin teaches a method for secure communication in a computer network, comprising:

secured communications within said computer network, for establishing secured communication between two or more clients via a communication proxy server (column 8, lines 2-17, i.e. the client and transaction server conducting transactions through the broker using SSL).

15. Jardin discloses that the communication occurs using a single secure communication port in disclosing that the communication between the client and broker and the broker and server and vice versa occurs using SSL. U.S. Patent No. 7,149,892 to Freed et al., hereinafter Freed, establishes that SSL communication occurs on port 443 at column 3, lines 20-23 and column 5, lines 48-56. Therefore, since the client and broker and the broker and server all communicate using SSL, they are only using secure port 443.

16. As per claim 9, Jardin teaches a method for secure communication in a computer system, comprising the steps of:

requesting communication by a client (i.e. client) for connection to a communication server (i.e. broker) (Figure 2 [block 210], column 4, line 55 to column 5, line 15, i.e. ClientHello messages to the broker/communication server);

receiving said connection request and a handshake sequence is performed between said client and said communication server (Figure 2, column 4, lines 34-59, i.e. client initiates a handshake operation with the broker pursuant to the SSL protocol);

establishing a secure connection between said client and said communication server (Figure 2 [blocks 250, 260], column 6, lines 1-9, i.e. client and broker establish SSL connection);

coordinating a new connection with the client by the communication server (column 6, lines 38-66, i.e. the broker establishing a connection with a server on the client's behalf);

initiating a handshake sequence with a second client (i.e. transaction server) via the communication server (i.e. broker) (Figure 3 [block 334], column 6, lines 43-57, column 7, lines 6-19, i.e. broker initiates a secure SSL handshake with the server); and

establishing a connection between the two clients via the communication server (column 8, lines 2-17, i.e. the client and transaction server conducting transactions through the broker).

17. Jardin discloses that the communication occurs using a single secure communication port in disclosing that the communication between the client and broker and the broker and server and vice versa occurs using SSL. U.S. Patent No. 7,149,892 to Freed et al., hereinafter Freed, establishes that SSL communication occurs on port 443 at column 3, lines 20-23 and column 5, lines 48-56. Therefore, since the client and broker and the broker and server communicate using SSL they are only using secure port 443.

18. Regarding claim 11, Jardin teaches wherein a single communication protocol using said single secure port is used (column 4, lines 26-29).

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19. Regarding claim 12, Jardin teaches wherein multiple protocols using said single secure communication port are used (column 4, lines 26-29).

20. As per claim 17, Jardin teaches computer software for a secure communication in a computer system, comprises:

secured communication within said computer system for establishing secured communications between two or more clients (column 8, lines 2-17, i.e. the client and transaction server conducting transactions through the broker using SSL).

21. Jardin discloses that the communication occurs using a single secure communication port in disclosing that the communication between the client and broker and the broker and server and vice versa occurs using SSL. U.S. Patent No. 7,149,892 to Freed et al., hereinafter Freed, establishes that SSL communication occurs on port 443 at column 3, lines 20-23 and column 5, lines 48-56. Therefore, since the client and broker and the broker and server all communicate using SSL, they are only using secure port 443.

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 3, 4, 6, 13, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jardin in view of U.S. Patent Application Publication No. 2003/0167403 to McCurley et al., hereinafter McCurley.

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24. Regarding claims 3 and 13, Jardin teaches wherein said single communication port allows access from behind gateway devices by establishing a secure proxy communication between said two clients (Figure 1 [blocks 118, 128], column 3, lines 51-64).

25. Jardin does not teach that the gateway devices are firewalls.

26. McCurley teaches establishing a secure tunnel between two devices behind firewalls (Figure 4, paragraphs 0065-0071).

27. It would have been obvious to one of ordinary skill in the art to establish a secure connection between two clients both behind firewalls, since McCurley states at paragraph 0041 that by allowing communication over a single port in a firewall it allows data to securely pass through the firewall, thereby providing access for roaming users and computers, for remote network administration, and for supporting virtual private networks implemented over the open network.

28. Regarding claims 4 and 14, Jardin teaches wherein said single communication port allows access inside gateways by establishing a secure proxy connection between said two clients (Figure 1 [blocks 118, 128], column 3, lines 51-64).

29. Jardin does not teach that the gateway devices are firewalls.

30. McCurley teaches establishing a secure tunnel between two devices behind firewalls (Figure 4, paragraphs 0065-0071).

31. It would have been obvious to one of ordinary skill in the art to establish a secure connection between two clients both behind firewalls, since McCurley states at paragraph 0041 that by allowing communication over a single port in a firewall it allows data to securely pass

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through the firewall, thereby providing access for roaming users and computers, for remote network administration, and for supporting virtual private networks implemented over the open network.

32. Regarding claims 6 and 16, Jardin teaches establishing a secure proxy communication between said two clients (column 8, lines 2-17).

33. Jardin does not teach the use of firewalls.

34. McCurley teaches firewalls (Figure 4, paragraphs 0065-0071). Since it is an industry standard and commonly accepted that SSL communicates over port 443, the system administrator would only have to set that once and not have to change the settings, if it was decided to allow access to the SSL protocol.

35. It would have been obvious to one of ordinary skill in the art to establish a secure connection between two clients both behind firewalls, since McCurley states at paragraph 0041 that by allowing communication over a single port in a firewall it allows data to securely pass through the firewall, thereby providing access for roaming users and computers, for remote network administration, and for supporting virtual private networks implemented over the open network.

Conclusion

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

37. The following patents are cited to further show the state of the art with respect to SSL session via a proxy device, such as:

United States Patent No. 6,052,785 to Lin et al., which is cited to show remote data access through an intermediary security mechanism.

United States Patent No. 6,584,567 to Bellwood et al., which is cited to show using a proxy to secure communication between a client and a set of servers.

United States Patent No. 6,983,382 to Hartke et al., which is cited to show an intermediary device used to accelerate SSL connections.

United States Patent No. 6,732,269 to Baskey et al., which is cited to show establishing a persistent SSL session via a proxy server.

United States Patent No. 6,993,651 to Wray et al., which is cited to show the SSL protocol traversing an intermediary device.

United States Patent No. 6,952,768 to Wray et al., which is cited to show the SSL protocol traversing an intermediary device.

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.

39. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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40. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christian LaForgia
Patent Examiner
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A handwritten signature in black ink, appearing to be 'CLF', written over a horizontal line.

Clf